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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/609,475	07/01/2003	Akio Sugimoto	KOBE.0052	1029

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EXAMINER	
VO, HAI	

ART UNIT	PAPER NUMBER
1771	

DATE MAILED: 07/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/609,475	SUGIMOTO ET AL.	
	Examiner	Art Unit	
	Hai Vo	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 April 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4 and 6-32* is/are pending in the application.

4a) Of the above claim(s) *19-22* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4, 6-18 and 23-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. The art rejections over Nagano et al (US 5,443,900) have been withdrawn in view of the present amendment. Nagano does not teach or suggest an electromagnetic wave absorber comprising a foamed layer as set forth in the claims.
2. The art rejections based on Holtrop et al (US 4,557,970) and EP 1020846 separately have been withdrawn in view of the present amendment. Each cited reference does not teach or disclose a laminate structure comprising a metal plate as set forth in the claims.
3. The art rejections based on Sato et al (US 4,734,323) and Wycech (US 6,372,334) separately are maintained.

Claim Objections

4. Claim 7 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim 1. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1-4, 6-18 and 23-32 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Sato et al (US 4,734,323). Sato discloses a laminate structure comprising a panel surface (hard metal plate) 1, an adhesive 20, a retainer layer 21 and a foam layer 23 (figure 6). Sato discloses that the vibration damping layer 7 and the sound proof layer 8 were attached, set to the panel surface of a vehicle and then heated to form the vibration damping layer and the porous soundproof layer respectively (column 16, lines 25-30). The porous soundproof layer has a thickness of 10 mm while the vibration layer has a thickness of 1 mm (table 6). Likewise, it is clearly apparent that the porous soundproof is thick enough to enhance a rigidity of the panel surface of the vehicle. Sato also discloses a laminate structure comprising a metal plate 9, a foam layer 8 and a retainer layer 7 as shown in figure 7. The three layers have been laminated to one another prior to the metal plate 9 being formed to a desired shape (column 14, lines 35-46). The retainer layer 12 and the foam layer 23 are made from chemically different resins (example 5). The foam layer includes 1,2-polybutadiene having a melting point of 80°C while the retainer layer includes a thermosetting phenol resin

which has a melting point much higher than the melting point of 1,2-polybutadiene (column 3, lines 15-17, column 4, lines 5-10). Likewise, the resins of the retainer layer and the foam layer would have different melting temperatures and foaming temperatures. Since Sato uses the same resin to form the foam layer as Applicants, it is not seen that the melting point of the resin would be outside the claimed range. This is in line with *In re Spada*, 15 USPQ 2d 1655 (1990) which holds that products of identical chemical composition can not have mutually exclusive properties. Thermally fusion, mixing the foaming agent, setting the foaming temperature are directed to product-by-process limitations. However, they are not as yet shown to produce a patentably distinct article. It is the examiner's position that the laminate structure is identical to or only slightly different than the claimed article prepared by the method of the claim, because both articles are formed from the same materials, having structural similarity. The laminate structure comprises of a foam layer/non-foam layer/hard plate. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or an obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). The burden has been shifted to the applicant to show unobvious differences between the claimed product and the prior art product. *In re Marosi,* 218 USPQ 289,291 (Fed. Cir. 1983). It is noted that if the applicant intends to rely on Examples in the

specification or in a submitted Declaration to show non-obviousness, the applicant should clearly state how the Examples of the present invention are commensurate in scope with the claims and how the Comparative Examples are commensurate in scope with Sato. Accordingly, it is the examiner's position that Sato anticipates or strongly suggests the claimed subject matter.

8. Claims 1-4, 6, 8-18, and 23-32 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Wycech (US 6,372,334). Wycech discloses a laminate structure comprising a metal substrate 1, a compliant foam layer 5, a rigid foam layer 6 and a backing film layer 7 (figure 5-7 and 9). Wycech discloses a first foamable resin and a second foamable resin are adhered to a hard plate prior to heating (column 3, lines 65-67, column 4, lines 1-3, and column 4, lines 55-62). The flat upper surface and flat lower surface of the laminate as shown in figure 3 indicates the metal plate 1 is not formed into a desired shape prior to the lamination. The rigid layer stiffens the panel (column 2, lines 60-61). Wycech discloses the polymers of the two foam layers are different (column 2, line 65 to column 3, line 1). Likewise, their melting points will be different. Wycech discloses the polymer of the rigid foam layer can be made from a material as taught by US 5,575,526 whose details have been incorporated by the reference. The '526 patent discloses the foam layer made from a thermoplastic resin, and a blowing agent. Mixing the foaming agent, setting the foaming temperature are directed to product-by-process limitations. However, they are not as yet shown to produce a patentably distinct article. It is the examiner's position that the laminate structure is

identical to or only slightly different than the claimed article prepared by the method of the claim, because both articles are formed from the same materials, having structural similarity. The laminate structure comprises of a foam layer/foam layer/hard plate. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or an obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). The burden has been shifted to the applicant to show unobvious differences between the claimed product and the prior art product. *In re Marosi,* 218 USPQ 289,291 (Fed. Cir. 1983). It is noted that if the applicant intends to rely on Examples in the specification or in a submitted Declaration to show non-obviousness, the applicant should clearly state how the Examples of the present invention are commensurate in scope with the claims and how the Comparative Examples are commensurate in scope with Wycech. Accordingly, it is the examiner's position that Wycech anticipates or strongly suggests the claimed subject matter.

Response to Arguments

9. The art rejections based on Sato and Wycech separately have been maintained for the following reasons. Applicants argue that neither of the cited references teaches or suggests at least foamable resin adhered to a hard plate prior to foaming wherein the foamable resin is foamed to a thickness that enhances the rigidity of at least the

metal hard plate. The examiner respectfully disagrees. Sato discloses that the vibration damping layer 7 and the sound proof layer 8 were attached, set to the panel surface of a vehicle and then heated to form the vibration damping layer and the porous soundproof layer respectively (column 16, lines 25-30). Sate teaches the porous soundproof layer and the vibration layer having a thickness of 10 mm and 1 mm respectively (table 6). Likewise, it is clearly apparent that the porous soundproof is thick enough to enhance a rigidity of the panel surface of the vehicle. Applicants argue that Sato does not teach the porous soundproof layer and the vibration layer are adhered to the metal plate prior to the metal plate being formed to a desired shape. The examiner respectfully disagrees. Sato also discloses a laminate structure comprising a metal plate 9, a foam layer 8 and a retainer layer 7 as shown in figure 7. The three layers have been laminated to one another prior to the metal plate 9 being formed to a desired shape (column 14, lines 35-46). The flat upper surface and flat lower surface of the laminate as shown in figure 7 indicates that the metal plate 9 is not formed into a desired shape prior to the lamination. The same rationals are applied to the art rejections over Wycech. Wycech discloses a first foamable resin and a second foamable resin adhered to a hard plate prior to heating (column 3, lines 65-67, column 4, lines 1-3, and column 4, lines 55-62). The flat upper surface and flat lower surface of the laminate as shown in figure 3 indicates that the metal plate 1 is not formed into a desired shape prior to the lamination.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (571) 272-1485. The examiner can normally be reached on Monday through Thursday, from 9:00 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hai Vo

HV

HAI VO
PRIMARY EXAMINER